# ΛΟυΛΤ≋Ο

# Aquatec to present two new technologies at Subsea Expo 2022

**Press Release** 08 February 2022 For Immediate Release

#### About Aquatec

Since its foundation in 1990, Aquatec has been designing and manufacturing innovative instruments and bespoke solutions to measure, monitor, and communicate underwater data. The company serves all subsea-related industries, including oceanographic, environmental, and offshore energy.

For more information please contact: Agustín Riso Marketing Manager ariso@aquatecgroup.com +44 (0) 1256 416010

**Best Small Company** 



The two pioneering technologies form part of Aquatec's newly developed Subsea Integrity<sup>™</sup> division, which focuses on creating world-leading products and solutions to improve efficiency and cut costs in subsea integrity management. The division is also steered towards the needs of marine renewables and other sustainable technologies as the Energy Transition progresses.

## The KINEK tron®



The **KINEK***tron*<sup>®</sup> will make its first official virtual appearance at Aquatec's stand and will be complemented with a special presentation from Aquatec's CEO, Andy Smerdon, who will be featured in the Subsea Integrity conference session on 23 February.

The **KINEK***tron*<sup>®</sup> Subsea Strain Monitoring Clamp is the world's first fully functional, tested and deployed retrofit subsea strain monitoring system capable of measuring strain on structural tubular members. It combines many of Aquatec's existing innovative underwater instrumentation and communications technologies with a new and unique patent-pending method for measuring strain in a robust ROV-installable package.

Key Features:

- Robust permanent magnet attachment technology, first developed by Aquatec for acoustic-linked cathodic protection monitor units on an FPU hull in 2018, providing > 1-ton attachment force;
- Unique multi-point strain transfer mechanism facilitating high dynamic range measurement with microstrain resolution, developed and tested with Aquatec designed test equipment.
- Dual through-water communications developed by Aquatec over the past decade, providing status updates via AQUAmodem® 500 acoustic comms link and high-speed optical data via ROV using AQUAmodem® Op2;



#### Aquatec Group Ltd. Registered in England & Wales No. 2523284

Visiting Address Aquatec House, Stroudley Road, Basingstoke RG24 8FW, UK

**Telephone / Fax** +44 (0) 1256 416010 +44 (0) 1256 416019

Internet www.aquatecgroup.com inquiry@aquatecgroup.com



**Press Release** 08 February 2022 For Immediate Release

#### About Aquatec

Since its foundation in 1990, Aquatec has been designing and manufacturing innovative instruments and bespoke solutions to measure, monitor, and communicate underwater data. The company serves all subsea-related industries, including oceanographic, environmental, and offshore energy.

For more information please contact: Agustín Riso Marketing Manager ariso@aquatecgroup.com +44 (0) 1256 416010



Aquatec Group Ltd. Registered in England & Wales No. 2523284

Visiting Address Aquatec House, Stroudley Road, Basingstoke RG24 8FW, UK

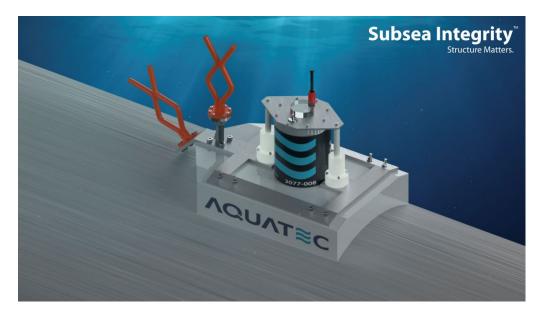
**Telephone / Fax** +44 (0) 1256 416010 +44 (0) 1256 416019

#### Internet

www.aquatecgroup.com inquiry@aquatecgroup.com

- Ultra-low-power design based on Aquatec's longstanding AQUA*logger*® technology, providing up to 3 years' continuous strain data;
- ROV interface developed by Aquatec for safe and effective system deployment on the structural member;

# **Temperature Monitoring System**



Aquatec has helped a leading transnational pipeline operator to better understand the thermal performance of their pipeline design. Aquatec's new Temperature Monitoring System is a clamp that provides long-term monitoring of pipeline skin temperature. Detailed theoretical modelling and a comprehensive experimental underwater thermodynamic programme were used to develop the precise relationship between skin temperature, ambient water temperature, and pipeline fluid temperature.

The magnetically attached retrofit clamp can be installed by divers in shallow water and in all water depths with ROV assistance. Data can be downloaded without disturbing the installation using the built-in optical communications link provided by Aquatec's AQUA*modem*® Op2. The temperature data is used to calibrate the operator's pipeline digital twin to ensure optimum flow integrity and manage thermal fatigue.

### Key Features:

- Three-year battery operating life
- Configurable logging interval, also adjustable after installation
- Hardened for H<sub>2</sub>S environment
- 2000m depth rated
- ROV installable ROV removable for repositioning if required
- Monitor pipeline and ambient temperatures to determine internal pipeline temperature without penetration
- Six temperature channels
- Pipe probe contact assurance



**Press Release** 08 February 2022 For Immediate Release

#### About Aquatec

Since its foundation in 1990, Aquatec has been designing and manufacturing innovative instruments and bespoke solutions to measure, monitor, and communicate underwater data. The company serves all subsea-related industries, including oceanographic, environmental, and offshore energy.

For more information please contact: Agustín Riso Marketing Manager ariso@aquatecgroup.com +44 (0) 1256 416010

- Three-year battery life
- Optical communications
- Magnetic mounting with single point ROV installation
- Heat and water flow and icing management
- Backed by extensive thermal simulation and real-world characterisations
- 2000m depth rating
- Custom software for extrapolating interior pipe temperatures
- Can be repositioned and recovered

Tony Mekky, Engineering Manager at Aquatec, has commented: "We are very excited to present these ground-breaking technologies to the public. The **KINEK***tron*<sup>®</sup> represents the next evolution in retrofit strain monitoring for subsea structures. This device allows the collection of long duration, high-speed data to validate structural models and aid in decisions related to maintenance and demanning. Also, our newly developed Temperature Monitoring System is a great step towards understanding thermal changes in subsea structures. Through modelling and profiling, the system allows customers to extract pipeline internal temperature. Aquatec is delighted to present these breakthroughs at Subsea Expo 2022."

###



Aquatec Group Ltd. Registered in England & Wales No. 2523284

Visiting Address Aquatec House, Stroudley Road, Basingstoke RG24 8FW, UK

**Telephone / Fax** +44 (0) 1256 416010 +44 (0) 1256 416019

Internet www.aquatecgroup.com inquiry@aquatecgroup.com